

Claim Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1-26. (Canceled):

Claim 27 (Withdrawn): A magnet roller for development comprising a roller, which comprises:

a plastic magnet containing magnetic powder dispersed in a high-molecular compound and is formed with at least one recess for receiving another member at a position corresponding to a given magnetic pole; and

a magnet molding received in said recess and having a stronger magnetic force than said plastic magnet,

wherein said magnet molding is produced by compression-molding a magnet compound material in a magnetic field while heating said magnet compound material at a temperature equal to or lower than a softening point of a thermoplastic resin, and said magnet compound material comprises, in addition to magnetic powder and fine, thermoplastic resin grains that are major components, at least one of a pigment and a charge control agent.

Claim 28 (Withdrawn): The roller as claimed in claim 27, wherein the magnet molding is magnetically anisotropic and has a $(BH)_{max}$ value of 13 mGOe or above.

Claim 29 (Withdrawn): A developing device comprising a magnet roller, said magnet roller comprising a roller, which comprises:

a plastic magnet containing magnetic powder dispersed in a high-molecular compound and is formed with at least one recess for receiving another member at a position corresponding to a given magnetic pole; and

a magnet molding received in said recess and having a stronger magnetic force than said plastic magnet,

wherein said magnet molding is produced by compression-molding a magnet compound material in a magnetic field while heating said magnet compound material at a temperature equal to or lower than a softening point of a thermoplastic resin, and said magnet compound material comprises, in addition to magnetic powder and fine, thermoplastic resin grains that are major components, at least one of a pigment and a charge control agent.

Claim 30 (Withdrawn): A process cartridge comprising a magnet roller for development, said magnet roller comprising a roller, which comprises:

a plastic magnet containing magnetic powder dispersed in a high-molecular compound and is formed with at least one recess for receiving another member at a position corresponding to a given magnetic pole; and

a magnet molding received in said recess and having a stronger magnetic force than said plastic magnet,

wherein said magnet molding is produced by compression-molding a magnet compound material in a magnetic field while heating said magnet compound material at a temperature equal to or lower than a softening point of a thermoplastic resin, and said magnet compound material comprises, in addition to magnetic powder and fine, thermoplastic resin grains that are major components, at least one of a pigment and a charge control agent.

Claim 31 (Withdrawn): An image forming apparatus comprising a magnet roller for development, said magnet roller comprising a roller, which comprises:

a plastic magnet containing magnetic powder dispersed in a high-molecular compound and is formed with at least one recess for receiving another member at a position corresponding to a given magnetic pole; and

a magnet molding received in said recess and having a stronger magnetic force than said plastic magnet,

wherein said magnet molding is produced by compression-molding a magnet compound material in a magnetic field while heating said magnet compound material at a temperature equal to or lower than a softening point of a thermoplastic resin, and said magnet compound material comprises, in addition to magnetic powder and fine, thermoplastic resin grains that are major components, at least one of a pigment and a charge control agent.

Claim 32. (New) A method of producing a magnet molding, comprising:

compression-molding a magnet compound material comprising a magnetic powder and fine thermoplastic resin grains having a softening point of 90° C or below while heating the magnetic powder to a temperature lower than the softening point by 10° to 40° C, said thermoplastic resin grains being one-tenth of the mean grain size of the magnetic powder, and while applying an orienting magnetic field to the magnet compound material in a direction that is perpendicular to the direction of compression molding, said magnetic compound material comprising at least one of a pigment and a charge control agent such that the total amount of non-magnetic ingredients ranges from 3 to 10 wt % of all ingredients of the magnetic compound material.

Claim 33. (New): The method as claimed in claim 32, wherein the thermoplastic resin grains comprise spherical grains produced by polymerization of a thermoplastic resin material.

Claim 34. (New) The method as claimed in claim 32, wherein a mixture of the thermoplastic resin grains and at least one of the pigment and the charge control agent comprises a kneaded compound of spherical grains.

Claim 35. (New): The method as claimed in claim 32, which further comprises a fluidity imparting agent of fine grain structure having surfaces that are subjected to hydrophobic processing.

Claim 36. (New): The method as claimed in claim 32, wherein the fluidity imparting agent is present in an amount of 0.3 wt.% and 0.8 wt.% of the entire amount of magnetic compound material.

Claim 37. (New) A magnet molding that is prepared by a method, comprising:
compression-molding a magnetic compound material comprising a magnetic powder and fine thermoplastic resin grains having a softening point of 90° C or below while heating the magnetic powder to a temperature lower than the softening point by 10° to 40° C, said thermoplastic resin grains being one-tenth of the mean grain size of the magnetic powder, and while applying an orienting magnetic field to the magnet compound material in a direction that is perpendicular to the direction of compression molding, said magnetic compound material comprising at least one of a pigment and a charge control agent such that the total

amount of non-magnetic ingredients ranges from 3 to 10 wt % of all ingredients of the magnetic compound material.

Claim 38. (New): The magnetic molding as claimed in claim 37, wherein the thermoplastic resin grains comprise spherical grains produced by polymerization of a thermoplastic resin material.

Claim 39. (New) The magnetic molding as claimed in claim 37, wherein a mixture of the thermoplastic resin grains and at least one of the pigment and the charge control agent comprises a kneaded compound of spherical grains.

Claim 40. (New): The magnetic molding as claimed in claim 37, which further comprises a fluidity imparting agent of fine grain structure having surfaces that are subjected to hydrophobic processing.

Claim 41. (New): The magnetic molding as claimed in claim 37, wherein the fluidity imparting agent is present in an amount of 0.3 wt.% and 0.8 wt.% of the entire amount of magnetic compound material.

Claim 42. (New): The magnetic molding as claimed in claim 37, wherein the magnetic force of the magnetic molding is at least 13 mGOE.